

WHAT IS CLAIMED IS:

1. A display device comprising:  
a first electrode formed over a first substrate;  
a first insulating film formed so as to cover an end of the first electrode;  
5 a light-emitting organic compound film over the first electrode and in contact with a side face of the first insulating film;  
a second electrode formed over the light-emitting organic compound film;  
a second insulating film formed over a periphery of the first substrate;  
an adhesive layer formed on the second insulating film;  
a second substrate in contact with the adhesive layer; and  
a light-emitting element comprising the light-emitting organic compound film interposed between the first electrode and the second electrode,  
wherein the first insulating film and the second insulating film comprise a same material.

2. A display device comprising:  
a first electrode formed over a first substrate;  
a first insulating film formed so as to cover an end of the first electrode;  
a light-emitting organic compound film over the first electrode and in contact with a  
20 side face of the first insulating film;  
a second electrode formed over the light-emitting organic compound film;  
a second insulating film formed over a periphery of the first substrate; and  
a second substrate provided so as to overlap the first insulating film and the second insulating film; and

a light-emitting element comprising the light-emitting organic compound film interposed between the first electrode and the second electrode,

wherein the first insulating film and the second insulating film comprise a same material, and

5 wherein a gap between the first substrate and the second substrate is filled with an adhesive layer.

3. A display device according to claim 1, wherein the second insulating film has a width of 100 to 5000  $\mu\text{m}$ .

4. A display device according to claim 2, wherein the second insulating film has a width of 100 to 5000  $\mu\text{m}$ .

5. A display device according to claim 1, wherein a protection layer covering the second electrode, the first insulating film and the second insulating film is provided.

6. A display device according to claim 2, wherein a protection layer covering the second electrode, the first insulating film and the second insulating film is provided.

20 7. A display device according to claim 5, wherein the first substrate and the second substrate comprise glass.

8. A display device according to claim 6, wherein the first substrate and the second substrate comprise glass.

9. A display device according to claim 1, wherein a gap between the first substrate and the second substrate is filled with an inactive gas or a nitrogen gas.

5            10. A display device according to claim 2, wherein a gap between the first substrate and the second substrate is filled with an inactive gas or a nitrogen gas.

11. A display device according to claim 1, wherein the adhesive layer has a thickness of 0.05 to 0.5  $\mu\text{m}$ .

12. A display device according to claim 2, wherein the adhesive layer has a thickness of 0.05 to 0.5  $\mu\text{m}$ .

13. A display device according to claim 1, wherein the first insulating film has a thickness of 1.0 to 10  $\mu\text{m}$ .

14. A display device according to claim 2, wherein the first insulating film has a thickness of 1.0 to 10  $\mu\text{m}$ .

20            15. A display device according to claim 1, wherein the second insulating film has a thickness of 1.0 to 10  $\mu\text{m}$ .

16. A display device according to claim 2, wherein the second insulating film has a thickness of 1.0 to 10  $\mu\text{m}$ .

17. A display device according to claim 1, wherein the first insulating film comprises any one of a polyimide resin film, an acrylic resin film, and a polyamide resin film.

18. A display device according to claim 2, wherein the first insulating film  
5 comprises any one of a polyimide resin film, an acrylic resin film, and a polyamide resin film.

19. A display device comprising:  
a first electrode formed over a first substrate;  
a first insulating film formed so as to cover an end of the first electrode; and  
a second insulating film provided in a convex manner on an upper face of the first  
insulating film,  
a light-emitting element comprising a light-emitting organic compound film  
interposed between the first electrode and a second electrode.

20. A display device comprising:  
a first electrode formed over a first substrate;  
a first insulating film formed so as to cover an end of the first electrode;  
a light-emitting organic compound film over the first electrode and in contact with  
the first insulating film;  
20 a second electrode formed over the light-emitting organic compound film;  
a second insulating film formed over a periphery of the first substrate;  
a third insulating film provided in a convex manner on an upper face of the first  
insulating film;  
an adhesive layer formed over the second insulating film; and

a second substrate in contact with the adhesive layer,  
a light-emitting element comprising the light-emitting organic compound film  
interposed between the first electrode and the second electrode.

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21. A display device according to claim 20, wherein the first insulating film and the  
second insulating film comprise a same material.

22. A display device according to claim 20, wherein the second insulating film has  
a width of 100 to 5000  $\mu\text{m}$ .

23. A display device according to claim 20, wherein a protection layer covering the  
second electrode, the first insulating film, the second insulating film and the third insulating  
film is provided.

24. A display device according to claim 23, wherein the protective layer is in  
contact with an external input terminal.

25. A display device according to claim 23, wherein the first substrate and the  
second substrate comprise glass.

26. A display device according to claim 20, wherein a gap between the first  
substrate and the second substrate is filled with an inert gas or a nitrogen gas.

27. A display device according to claim 20, wherein the adhesive layer has a thickness of 0.05 to 0.5  $\mu\text{m}$ .

28. A display device according to claim 20, wherein the first insulating film has a thickness of 1.0 to 10  $\mu\text{m}$ .

29. A display device according to claim 20, wherein the second insulating film has a thickness of 1.0 to 10  $\mu\text{m}$ .

30. A display device according to 20, wherein the third insulating film has a thickness of 0.2 to 10  $\mu\text{m}$ .

31. A display device according to claim 19, wherein the second insulating film comprises any one of a polyimide resin film, an acrylic resin film, and a polyamide resin film.

32. A display device according to claim 20, wherein the second insulating film comprises any one of a polyimide resin film, an acrylic resin film, and a polyamide resin film.

33. A display device comprising:  
a first electrode over a first substrate;  
a first insulating film provided so as to cover an end of the first electrode;  
a light-emitting organic compound film over the first electrode and in contact with a side face of the first insulating film;  
a second electrode over the light-emitting organic compound film;

a light-emitting element comprising the light-emitting organic compound film interposed between the first electrode and second electrode;

a second insulating provided in a periphery of the first substrate;

5 a third insulating film provided along the second insulating film and interposed between the first insulating film and the second insulating film;

a desiccant provided in a gap between the second insulating film and the third insulating film.

34. A display device according to claim 33, further comprising an adhesive layer above the second insulating film, wherein the adhesive layer is in contact with the second substrate.

35. A display device according to claim 33, wherein the first insulating film, the second insulating film and the third insulating film comprise the same material.

36. A display device according to claim 33, wherein the second insulating film has a width of 200 to 5000  $\mu\text{m}$ .

20 37. A display device according to claim 33, wherein a protection layer covering the second electrode, the first insulating film, the second insulating film and the third insulating film is provided.

38. A display device according to claim 37, wherein the first substrate and the second substrate comprise glass.

39. A display device according to claim 38, wherein a gap between the first substrate and the second substrate is filled with an inert gas or a nitrogen gas.

5 40. A display device according to claim 33, wherein the adhesive layer has a thickness of 0.05 to 0.5  $\mu\text{m}$ .

41. A display device according to claim 33, wherein the second insulating film comprises any one of a polyimide resin film, an acrylic resin film, and a polyamide resin film.

42. A method of manufacturing a display device including an organic light-emitting element formed of an organic compound film sandwiched between a first electrode and a second electrode, comprising the steps of:

selectively forming the first electrode on a first substrate;  
forming an insulating film;  
patterning the insulating film to form a first insulating film covering an end of the first electrode and a second insulating film provided in a periphery of the first substrate;  
forming an organic compound film on the first electrode;  
forming the second electrode on the organic compound film;  
providing an adhesive layer on the second insulating film; and  
bonding the first substrate and the second substrate to each other.

43. A method of manufacturing a display device including an organic light-emitting element formed of an organic compound film sandwiched between a first electrode



and a second electrode, comprising the steps of:

selectively forming the first electrode on a first substrate;

forming an insulating film;

patterning the insulating film to form a first insulating film covering an end of the

5 first electrode and a second insulating film provided in a periphery area of the first substrate;

forming an organic compound film on the first electrode;

forming the second electrode on the organic compound film;

providing an adhesive layer which covers the first insulating film, the second  
insulating film and the second electrode; and

bonding the first substrate and the second substrate to each other.

44. A method of manufacturing a display device including an organic light-  
emitting element formed of an organic compound film sandwiched between a first electrode  
and a second electrode, comprising the steps of:

selectively forming the first electrode on a first substrate;

forming an insulating film;

patterning the insulating film to form a first insulating film covering an end of the  
first electrode and a second insulating film provided in a periphery of the first substrate;

forming an insulating film;

20 patterning the insulating film formed in the fourth step to provide a convex-shaped  
third insulating film at least on an upper face of the first insulating film;

forming an organic compound film on the first electrode so as to be in contact with  
a side face of the first insulating film;

forming the second electrode on the organic compound film;

forming an adhesive layer on the second insulating film; and  
bonding the first substrate and the second substrate to each other.

45. A method of manufacturing a display device including an organic light-  
emitting element formed of an organic compound film sandwiched between a first electrode  
and a second electrode, comprising the steps of:

selectively forming the first electrode on a first substrate;

forming an insulating film;

patterning the insulating film to form a first insulating film covering an end of the  
first electrode, a second insulating film provided in a periphery of the first substrate, and a  
third insulating film provided between the first insulating film and the second insulating film;

forming the organic compound film on the first electrode;

forming the second electrode on the organic compound film;

filling a gap between the second insulating film and the third insulating film with a  
desiccant;

forming a layer having adhesion on the second insulating film; and

bonding the first substrate and the second substrate to each other.

46. A method of manufacturing a display device claim 42, further comprising,  
between the step of forming the second electrode and the step of providing the adhesive layer,  
a step of providing a protective film covering the first insulating film, the second insulating  
film and the second electrode.

47. A method of manufacturing a display device claim 43, further comprising,

between the step of forming the second electrode and the step of providing the adhesive layer, a step of providing a protective film covering the first insulating film, the second insulating film and the second electrode.

5           48. A method of manufacturing a display device according to claim 44, further comprising, between the step of forming the second electrode and the step of forming the adhesive layer, a step of providing a protective film covering the first insulating film, the second insulating film, the third insulating film and the second electrode.

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288120-2818201           49. A method of manufacturing a display device according to claim 45, further comprising, between the step of forming the second electrode and the step of filling a gap between the second insulating film and the third insulating film, a step of providing a protective film covering the first insulating film, the second insulating film, the third insulating film and the second electrode.

50. A method of manufacturing a display device according to claim 42, wherein the second insulating film has a width of 100 to 5000  $\mu\text{m}$ .

20           51. A method of manufacturing a display device according to claim 43, wherein the second insulating film has a width of 100 to 5000  $\mu\text{m}$ .

52. A method of manufacturing a display device according to claim 44, wherein the second insulating film has a width of 100 to 5000  $\mu\text{m}$ .

53. A method of manufacturing a display device according to claim 45, wherein the second insulating film has a width of 100 to 5000  $\mu\text{m}$ .

54. A method of manufacturing a display device according to claim 50, wherein the  
5 second insulating film has a thickness of 1.0 to 10  $\mu\text{m}$ .

55. A method of manufacturing a display device according to claim 51, wherein the second insulating film has a thickness of 1.0 to 10  $\mu\text{m}$ .

56. A method of manufacturing a display device according to claim 52, wherein the second insulating film has a thickness of 1.0 to 10  $\mu\text{m}$ .

57. A method of manufacturing a display device according to claim 53, wherein the second insulating film has a thickness of 1.0 to 10  $\mu\text{m}$ .

58. A method of manufacturing a display device according to claim 54, wherein the second insulating film is made of any one of a polyimide resin film, an acrylic resin film, and a polyamide resin film.

20 59. A method of manufacturing a display device according to claim 55, wherein the second insulating film is made of any one of a polyimide resin film, an acrylic resin film, and a polyamide resin film.

60. A method of manufacturing a display device according to claim 56, wherein the

second insulating film is made of any one of a polyimide resin film, an acrylic resin film, and a polyamide resin film.

61. A method of manufacturing a display device according to claim 57, wherein the second insulating film is made of any one of a polyimide resin film, an acrylic resin film, and a polyamide resin film.

62. A method of manufacturing a display device according to claim 42, wherein, subsequent to the step bonding the first substrate and the second substrate, the first substrate and the second substrate are cut by a CO<sub>2</sub> laser.

63. A method of manufacturing a display device according to claim 42, wherein the first substrate and the second substrate are bonded to each other under an inert gas or a nitrogen atmosphere in the step of bonding the first substrate and the second substrate.

64. A method of manufacturing a display device according to claim 43, wherein the first substrate and the second substrate are bonded to each other under an inert gas or a nitrogen atmosphere in the step of bonding the first substrate and the second substrate.

65. A method of manufacturing a display device according to claim 44, wherein the first substrate and the second substrate are bonded to each other under an inert gas or a nitrogen atmosphere in the step of bonding the first substrate and the second substrate.

66. The method of manufacturing a display device according to claim 45, wherein

the first substrate and the second substrate are bonded to each other under an inert gas or a nitrogen atmosphere in the step of bonding the first substrate and the second substrate.

67. A display device according to claim 1, wherein the semiconductor device is incorporated into an electronic equipment selected from the group consisting of a cellular phone, a mobile computer, a portable information terminal, an electronic book, a video camera, a personal computer, a DVD and a digital camera.

68. A display device according to claim 2, wherein the semiconductor device is incorporated into an electronic equipment selected from the group consisting of a cellular phone, a mobile computer, a portable information terminal, an electronic book, a video camera, a personal computer, a DVD and a digital camera.

69. A display device according to claim 19, wherein the semiconductor device is incorporated into an electronic equipment selected from the group consisting of a cellular phone, a mobile computer, a portable information terminal, an electronic book, a video camera, a personal computer, a DVD and a digital camera.

70. A display device according to claim 20, wherein the semiconductor device is incorporated into an electronic equipment selected from the group consisting of a cellular phone, a mobile computer, a portable information terminal, an electronic book, a video camera, a personal computer, a DVD and a digital camera.

71. A display device according to claim 33, wherein the semiconductor device is

incorporated into an electronic equipment selected from the group consisting of a cellular phone, a mobile computer, a portable information terminal, an electronic book, a video camera, a personal computer, a DVD and a digital camera.

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